

Claims

1. Constant-force device, suitable for its integration into movements of watches, particularly of wrist watches, with an indirect-second mechanism having an intermediate second pinion (14) driven by a second wheel (9) of the movement and an indirect-second wheel (15), and comprising a tensioning module (4, 5, 6, 7, 8), a cam (2), a lever (11), and a stop wheel (13), characterized in that the stop wheel (13) of the constant-force device is arranged on the intermediate second pinion (14) of the indirect-second mechanism.
2. Constant-force device according to the preceding claim, characterized in that the arbor of lever (11) of the constant-force device is identical with the arbor of the second wheel (9) of the watch movement.
3. Constant-force device according to the preceding claim, characterized in that lever (11) is rotatably mounted by means of a ball bearing (12) onto a second-wheel pinion (10) carrying the second wheel (9).
4. Constant-force device according to one of the preceding claims, characterized in that the teeth of stop wheel (13) have a rounded section corresponding to a tilting motion of the intermediate second pinion (14) and of stop wheel (13).
5. Constant-force device according to one of the preceding claims, characterized in that the tensioning module comprises a tensioning-arm pinion (4), a tensioning arm (5), a stud (6), a collet (7), and a helical spring (8) and is mounted on an escape-wheel shaft (3) of the watch movement that carries an escape wheel (1).
6. Constant-force device according to the preceding claim, characterized in that the tensioning-arm pinion (4) of the tensioning module which is mounted rotatably around the escape-wheel shaft (3) is engaged with the second wheel (9) of the movement, and that the collet (7) is attached to the escape-wheel shaft (3).

7. Constant-force device according to one of the preceding claims, characterized in that the cam (2) that cooperates with lever (11) is mounted on an escape-wheel shaft (3) of the movement that carries an escape wheel (1).
- 5 8. Movement of a watch, particularly of a wrist watch, with an indirect-second mechanism comprising an intermediate second pinion (14) driven by a second wheel (9) of the movement, and an indirect-second wheel (15), characterized in that it contains a constant-force device according to one of the preceding claims.
- 10 9. Movement according to the preceding claim, characterized in that the intermediate second pinion (14) is made tiltable in order to be able to realize a chronograph mechanism.
- 15 10. Movement according to the preceding claim, characterized in that in a first position (I) of the intermediate second pinion (14) the indirect-second wheel (15) is engaged with it, while in a second, tilted position (II) of the intermediate second pinion (14) it is uncoupled from it.